Chronic Ulcerative Colitis—Psychosomatic Factors

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SUMMARY

In six cases of idiopathic ulcerative colitis here reported, close correlation with emotional stress was shown. Psychosomatic relationship seemed definite. Experience with 85 patients with ulcerative colitis has led to the suggestion that emotional stress may be causative or a predisposing factor in some, perhaps all, such cases.

ALTHOUGH the clinical manifestations are fairly well defined, the concepts of the origin and delineation of chronic ulcerative colitis are not clear-cut. One established characteristic of the disease is a pronounced tendency to recur. Another is the preponderant incidence among persons in the age span from adolescence to about the fortieth year. The disease has been reported occasionally in children, and the author has observed one patient with a first attack at age 61.

It is possible to differentiate as a class certain cases in which the disease is due to, or associated with, chronic infection with dysentery bacilli. Even in this group the disease cannot with certainty be ascribed to the bacillary infection alone. The same is true of cases in which there is current or antecedent amebiasis. Here the importance of secondary bacterial infection has been definitely recognized. Into another classification might be put a large residuum of cases in which primary biologic damage has been done to the colon, as by nutritional deficiency, congenital abnormality, or preceding severe infection with dysentery bacilli or amebae.

Recently in reviewing 65 cases previously reported[3,4] as well as the histories in about 20 subsequent cases, the author was impressed with the pronounced tendency to relapse. This led to meditation on other factors which might be common to all or to a definite group of these cases and related to the incidence of relapse. Consideration of certain patients under treatment at the time brought recognition that present in each were factors of heavy emotional stress and nervous tension. Recent references in the literature emphasize this aspect of the subject.[1] Kirsner and co-workers,[2] in a survey of 100 cases, stated that in 34 per cent of them, relapses could be attributed to emotional disturbances. These investigators noted another outstanding clinical feature: The cure rate (6 per cent) was exceeded by the death rate (14 per cent).

It seems that so-called idiopathic chronic ulcerative colitis may arise on a psychosomatic basis, and while it is doubtful that this is basic in the origin of all cases, it is a possible underlying factor in all. It seems to give adequate explanation of the peculiarities observed clinically and to offer a sound basis for effective treatment. The mechanism would involve the usual spasm of involuntary muscle fibres, local and general malnutrition, and resulting interference with local circulation.

The following six summarized case histories illustrate the association with emotional factors.

CASE 1: A man, 30 years of age, was first observed April 9, 1947, with complaint of mucus and blood in the stools.

Hyposensitivity to Libman's test was noted, with low knee jerks. The abdomen was tense and thin but not tender. Sigmoidoscopic examination showed an area in the upper rectum and lower sigmoid colon of pink, ground-glass appearing mucosa, oozing blood and a considerable amount of dark gray mucus. No parasites were found and cultures of swabs grew only the usual colonic flora. Examinations of the stool showed large amounts of gross blood, gray mucus and pus cells. X-ray examination of the gastrointestinal tract showed no organic lesion although there was evidence of moderate mucosal thickening in the lower jejunum and ileum.

A clinical diagnosis of early chronic ulcerative colitis was made, and although the patient was an agreeable, pleasant person who said he was unworried and felt no nervousness, underlying neurotic factors were suspected.

Psychotherapeutic conferences elicited a story of childhood and early adolescent hostility toward the father, who was characterized as dominating, imperious and dogmatic, especially in relation to insistence that the son prepare for engineering as a profession. There was also a history of previous attacks of colitis and gastrointestinal distress associated with emotional disturbances:

1. While attending a private high school for boys the patient had had an attack of epigastric pain with severe constipation and fever. The symptoms quickly subsided.

2. A few months later dark red blood appeared in the stool with regular bowel movement. There was a slight elevation of temperature, but no pain.

3. Indigestion and abdominal discomfort followed transfer from the private high school (and abundant personal attention) to college where supervision was minimal.

4. An attack of colitis with pain, bleeding, dysentery and loss of weight occurred during the patient's second college year when a childhood sweetheart had broken their engagement to marry. The colitis persisted for two years despite dietary and medicinal therapies. Recovery was gradual but complete. The patient failed in his studies, changed schools, but still "could not stomach" the profession his father had chosen for him.

After the interview in which this story was finally crystallized, the colitis was sharply accentuated.

Soon afterward the patient was inducted into the army, where he adjusted fairly well until ordered to prepare for overseas duty. Colitis occurred again. It necessitated hospitalization, lasted ten weeks, and resulted in discharge from the army.

Subsequently, the patient became happily married. He was employed as a clerk with no professional training. However, he stated that he still had the feeling of pressure from his father.

The colitis gradually subsided and symptoms of colonic bleeding and inflammation disappeared. Although the possibility of recrudescence was explained, the patient decided against psychotherapy.

CASE 2: A 36-year old married male was first observed by the author April 19, 1948, with a complaint of severe lateral and posterior pain under the lower left ribs on inspiration. Beginning January 1, 1948, the patient had had severe diarrhea with colic preceding each of ten daily bowel movements. Nausea and vomiting were present on the first day only, and there was no gross bleeding. There was no history of earlier gastroenteric symptoms of any kind. The diarrhea gradually subsided in the next few days but did not stop entirely. In mid-February it again became worse and the patient began losing weight, had a low fever and felt weak. He consulted a physician and was hospitalized. After careful study, the tentative diagnosis was chronic idiopathic ulcerative colitis.

The patient remained in the hospital two months with fever ranging from 100°F. to 103.5°F. daily. Weakness increased, loss of weight continued, and bowel movements averaged eight to ten each 24 hours. In a proctoscopic examination an easily bleeding area on the edge of the lower rectal valve, with apparently normal mucosa above it, was noted. Cultures of stools were negative for pathogens and adequate search revealed no parasites.

When first observed by the author because of the pain in the lower left chest, the patient was hospitalized because of evidence of pneumonitis. X-ray examination confirmed this, and a further x-ray study 18 days later showed improvement. Those of the colon showed an atonic dilated organ with evidence of extensive mucosal edema and ulceration. At that time there were eight to ten bowel movements daily, with pain but no blood.

Repetition of tests and examinations that had been carried out at the time of the previous hospitalization confirmed the findings that had been noted then. Treatment consisting of blood transfusions, various antibiotics and other medication, dietary control and high vitamin intake had no effect on symptoms.

As it had been noticed that the patient was tense and highly emotional, he was discharged from the hospital and referred to a psychiatrist, who reported a high degree of dependence upon both mother and wife, with resentment toward the mother and probably toward the wife. The patient had maintained independence only with difficulty for the past several years. Struggle between dependence and independence had been enhanced by a recently developed ambivalence with regard to an executive of the firm for which he worked. The psychiatrist felt that the tension produced by these conflicts played an important role in the colitis.

In the course of several months of psychotherapy the diarrhea diminished and finally stopped. The patient gained weight and said he felt much better. He had quit his former job and after several months of idleness he took another. With adequate guidance, future good adjustment was considered probable.

CASE 3: A housewife about 25 years of age who had two children was first observed March 31, 1939, because of dysentery which had begun a month before with eight to ten bowel movements daily, attended by pain and low fever. Stools contained blood and mucus. There was history of previous attacks, one five years and another four years previously, which had been of short duration. A year later a third attack lasted two months and the patient was hospitalized. Amebae were said to have been found in the stools at that time. After lapse of another year and a half, a fourth attack occurred during pregnancy and the pregnancy was terminated. Symptoms disappeared after two months, apparently without relation to medical treatment.

The patient was hospitalized for the current illness. Upon sigmoidoscopic examination it was noted that the mucosa had a red ground-glass appearance. It bled easily, and a thin fibrinous exudate was present. No parasites were found on adequate examination and results of specific tests for bacterial or other pathogens were negative. Gastrointestinal x-rays with barium enema showed colonic spasticity only. The attack subsided in about two months but in the next several years relapses of varying degrees of severity occurred, with increasing x-ray evidence of ulcerative colitis.

Finally, in 1947 the patient was referred for psychiatric appraisal and was found to have emotional immaturity "quite typical of patients with ulcerative colitis and other colitic diseases."

CASE 4: A housewife, 37 years of age, was first observed March 16, 1945, with complaint of diarrhea, headache, extreme fatigue, frequent sore throat, indigestion, and pains in legs and feet. There was history of "chronic colitis"—severe recurring attacks of diarrhea with blood and mucus in the stool.

The patient, who was 47 inches tall, weighed 105 pounds. She was intense, anxious and poorly nourished.

Gastrointestinal x-ray studies showed only pylorospasm and persistent gastric residue. No parasites were found in the stools. There was no fever.

Interview elicited evidence of high nervous tension and emotional stresses dating from childhood, and chronic hostility toward mother and husband. In the ensuing three years there were numerous flare-ups of colitis associated with episodes of aggravated emotional tension.

In February, 1948, the patient was hospitalized because of severe colitis and prostration. X-ray studies with barium enema showed haustrations almost completely absent, and there were numerous punched-out ulcers from the upper sigmoid colon to the cecum. Proctoscopic examination showed the rectal mucosa to be normal. The temperature was 103°F. and the patient was mentally depressed and in a state of severe malnutrition. Ileostomy was done and for 15 days there was clinical improvement, moderate psychologic leavening and better food intake. Proteins, vitamins and electrolytes were given parenterally. Mental depression returned, was followed by physical relapse, and the patient died April 9, 1948.

At postmortem examination there was anatomic diagnosis of healing chronic ulcerative colitis, acute ulcerative ileitis and severe emaciation. The lesions of colitis were almost healed but considerable scarring was noted. An interesting feature was the relatively recent ulceration of the ileum. Scattered ulcers were found extending as far upward as the jejunum. Inanition apparently was the cause of death.

CASE 5: The patient, an unmarried woman 26 years of age, was first observed March 9, 1945, because of recurring dysentery, with blood and mucus in stools, and severe colic. Repeated episodes of several weeks each had occurred in the preceding year.

The patient was 66 inches tall, weighed 120 pounds and appeared to be poorly nourished, nervous, and apprehensive. Upon physical examination, tachycardia and vasomotor instability were noted. A red ground-glass appearance of the mucosa of the rectum, with many shallow irregular ulcers, was observed in sigmoidoscopic examination. No parasites were found in a study of mucosal scraping, and no pathogens developed on cultures. Skin food-antigen tests gave 1 plus positive reactions to onion, tea, potato and yeast. That

for total milk was negative. Gastrointestinal x-ray studies showed no abnormality. The basal metabolic rate was 5 plus.

Psychologically the patient was extremely insecure with great dependence on and unconscious hatred of her mother, who was exacting, meticulous, and highly possessive. The patient was fearful, and this culminated, as her marriage approached, in panicky fear of marriage and increased feelings of guilt toward her mother. Psychotherapy largely dissipated the guilt, fear, hatred and dependence so that she entered marriage normally and has had to date only one short and mild attack of colitis. The improvement has been remarkable as the patient's independence, insight and security have increased.

CASE 6: A 28-year-old married woman with no children was first observed September 28, 1943, because of dysentery (12 bowel movements daily) with much blood, mucus and pain. The patient had had life-long constipation with attacks of diarrhea. After scarlet fever at age 7 she had attacks of dysentery lasting for weeks or months. The patient had always disliked milk, and it caused indigestion if drunk in more than minimal amount. Eating spiced, fatty and fried foods also caused gastric distress. Many stool examinations over the years had never confirmed suspicion of amebic dysentery. The patient had not lost weight and at no time was fever present.

General abdominal soreness was noted. The blood pressure was 100 mm. of mercury systolic and 72 mm. diastolic. Erythrocytes numbered 3.5 million with hemoglobin value (Sahli) of 54 per cent. Leukocytes numbered 4,800 with 57 per cent granulocytes and 39 per cent lymphocytes. Gastrointestinal x-ray studies gave evidence only of chronic colitis, especially of the descending colon. Roentgenologic studies of the gastrointestinal tract in 1946 had shown no abnormality, and studies with barium enema showed no evidence of colitis.

In psychiatric appraisal, rage against the father, with repeated death wishes, was noted. The patient had a panicky fear of her father which was associated with his addiction to alcohol. This animosity, which extended back to early childhood, was extended later to the patient's husband. Attacks of dysentery, associated with colonic hemorrhage, severe colic and nausea, recurred irregularly until January, 1948, when psychotherapy was instituted. No exacerbations have occurred since.

DISCUSSION

It is to be noted that in the first 35 cases of chronic ulcerative colitis reported by the author, 17 of the patients were definitely neurotic. In the second report, covering 30 cases, it was noted that "allergic and psychologic" features were prominent. All the patients in the six cases reported herewith had pronounced emotional disturbances. Kirsner, and co-workers[2] stated: "The tendency toward exacerbations and remissions of symptoms is one of the characteristic features of nonspecific ulcerative colitis. It is possible to attribute the relapses in this series to emotional disturbances in 34 per cent (of 100 cases); to infections of the respiratory tract in 29 per cent, and to physical fatigue in 14 per cent. However, these represent several of the more common difficulties in life, and, hence the relationship may be more accidental than causal. Indeed, relapses seem to occur with any form of stress and to be a reflection of a labile intestinal response."

It would appear that psychodynamic appraisal of the patient were an essential part of diagnostic study in each case. This is more important than search for parasitic, bacterial or allergic factors. Demonstration of Endameba histolytica, dysentery bacilli, or neoplasm at once removes the case from the category of idiopathic ulcerative colitis.

TREATMENT

Psychotherapy should be instituted early. It must be skillful and often it may have to extend deep into the emotional substrate.

It is always to be remembered that when organic evidence of colitis is present, the colitis must be treated as a thing in itself, while psychotherapy reaches far deeper and aims at prevention of recurrence.

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